

## **CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE**

### **GUIDELINES FOR EXPERIMENTATION WITH TRAFFIC CONTROL DEVICES**

#### **I. PURPOSE**

These guidelines are for cities, counties, and others in California concerned with experimentation with traffic control devices. It has been prepared as a guide for requests for experimentation, procedure for monitoring and reporting on approved experimental projects, and for detailing the work plan, objectives, and procedure of each approved experiment.

Where Federal Standards exist, experimentation is governed by Federal experimentation procedures.

These guidelines apply where only State standards exist and need revision, or where neither State or Federal standards exist.

#### **II. DEFINITIONS**

Experimentation is defined as research involving the acts of testing, evaluating, analyzing or discovering the effect of a specific device, principle, supposition, etc., usually carried out in an operational context. Experimentation may also be performed in a laboratory.

The request for experimentation is a submission specifically requesting approval to use a non-standard device on public roadways for purposes of gathering verification data.

As used herein, the term "device" includes not only signs, signals, and markings, but also their application and manner of use.

The California Traffic Control Devices Committee is hereby referred to as the Committee.

#### **III. SUBMISSION OF PROJECTS**

A. Government agency sponsored individuals, commercial firms, or others; or government agencies themselves, are equally eligible to submit requests for experimentation.

B. Experimentation requests should contain the following information:

1. A statement indicating the nature of the problem.
2. A description of the proposed change, how it was developed, the manner in which it deviates from the standard, and how it is expected to be an improvement over existing standards.
3. Any illustration, photograph, or video which would help explain the experimental device or use of this device.

4. Any supporting data as to how the experimental device was developed, if it has been tried, in what ways it was found to be adequate or inadequate, and how was this choice of device or application arrived at.

Requests for experimentation that are submitted without an explanation of the objective, scope, and duration will be returned to the originator for amplification.

#### IV. PROCEDURE FOR PROCESSING

- A. All requests for experimentation shall be reviewed by the Committee Secretary to determine whether other related experimentation has been scheduled, in process, or already completed.
- B. The Committee Secretary shall list the experimentation proposal on the next Committee agenda for review and approval. The Committee's approval should also include the specific guidelines to be followed for the experimentation.
- C. Action by the Committee on any request for experimental use of a non-conforming device may take several forms:
  1. Approval of the device for limited use on an experimental project.
  2. Approval of the device for limited use in a formal research project.
  3. Disapproval until such time as satisfactory research or other justification is submitted.
  4. Disapproval.
- D. After action by the Committee, the Secretary will notify the originating party of its decision. If approved, the originating parties will be requested to submit a status report on the experimental testing at appropriate intervals. When the results of experimentation are completed, a final report will be prepared and forwarded to the Secretary for Committee review.
- F. The agency receiving approval for experimentation must agree-to faithfully follow the specific guidelines for the experimentation, must forward reports as indicated, and must agree to terminate the experimentation upon notification.

#### V. SPECIFIC GUIDELINES FOR EXPERIMENTAL PROPOSAL

A specific proposal shall be submitted for each request. This proposal may be submitted with the initial request or may be a follow-up to specific comments by the Committee. The proposal, after approval by the Committee, shall become an integral part of the approved experimentation. Each proposal shall include:

- A. Scope: A detailed description of the experimentation, locations of installation, and number of experimental projects.

- B. Work Plan: A description of the proposed plan of study; the variables that are to be measured; the criteria against which the devices is to be evaluated; observations, measures and data which will be collected; whether the experimentation will be carried out in the field or under laboratory conditions; how installations of the experimental device or application will be made; the indication if any adverse effects on safety or traffic operations can be anticipated, together with the means that may be taken to minimize them; and the factors which will be held constant or measured and controlled in order to ensure that the true effects of the device are measured.
- C. Time Periods: Time periods for experimentation shall normally not be less than six months nor more than two years.

V. **SPECIFIC GUIDELINES FOR EXPERIMENTAL PROPOSAL** (continued.)

- D. Evaluation Procedures: The Committee shall approve criteria which will be used to evaluate experimental devices or applications. To permit meaningful comparisons with standard installations, advice from specialists such as human factors experts, statisticians, etc., may be included.
- E. Reporting: A written status report must be forwarded to the sponsor 45 days prior to each public meeting. A final report must be completed within 90 days of the terminal date of the experimentation and forwarded to the Executive Secretary. Status reports shall describe the progress of the work, any particular deviation from the work plan and anticipated time of conclusion. The final report shall contain, as a minimum, the basic information on the problem, the preliminary investigations, the proposed solutions, the study procedures, the detailed analysis of the data, the results of the work, a discussion of the results, and whatever conclusions are drawn. If a change in the State Traffic Manual is proposed, specific wording of this change should be included.
- F. Administration: All experimentation proposals shall include the agency sponsoring the study, the agency conducting the study, and the name and titles of principal researchers. There must be proof of professional traffic engineering capabilities and other related professional expertise to perform the experimentation and related evaluation processes.

VI. **TERMINATION OF EXPERIMENTATION**

The project must terminate at the end of the approved period unless an extension is granted, and all experimental devices and applications must be removed unless specific permission is given for continued operation. The Committee may, at any time, terminate approval of experimentation if significant safety hazards are indicated to be directly or indirectly attributable to the experimentation. Approval of any experimentation may also be terminated if no status report is received 45 days prior to each public meeting or no final report is received within 90 days of the terminal date of the experimentation.

## VII. REMOVAL OF EXPERIMENTATION INSTALLATIONS

All experimentation installations shall be removed upon termination of the experiment when a decision is made by the Committee that a change in the State Traffic Manual to permit the device is not warranted.

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